

not removed after paralysis and before transport. This appears to hold for *S. relucens*. Presumably the single sting and use of small dipterous prey have been important in the evolutionary convergence of prey carriage on the sting in these two groups of wasps. Some authors include both *Sericophorus* and *Oxybelus* in the Larrinae (Evans, 1964; Lomholdt, 1985). Despite being considered in the same subfamily, they are not closely related (Lomholdt, 1985) and therefore prey transport on the sting in these two taxa is a convergence, not a result of common descent.

The fly and wasp were identified by Dr. D. Colless (Australian National Insect Collection, Canberra) and Dr. O. Lomholdt (Zoologisk Museum, Copenhagen), respectively and are preserved at their institutions. Chris Thomson and Chris Reid provided helpful advice on the manuscript.—*David B. McCorquodale, Department of Zoology, Australian National University, GPO Box 4, Canberra, ACT, 2601, Australia.*

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OBSERVATIONS ON THE SWARMING BEHAVIOR OF *EUCHELICHR LONGIPES* JEANNEL IN NORTHERN MADAGASCAR (HETEROPTERA: ENICOCEPHALIDAE)

Aerial swarming behavior in members of the Enicocephalidae has been reported by many authors, but little information is available on the prevailing conditions that

might influence such behavior, especially in the tropics. It was thus with some interest that I came upon several swarms of *Euchelichir longipes* Jeannel on the morning of 16 November 1986 in the Mt. d'Ambre forest reserve south of Diego Suarez, Madagascar. I observed the insects swarming in groups of 10 to 30 along the trail to the Petite Cascade, at an elevation of 990 m (3,250 ft), and took the air temperature as 24°C (75°F) in the shade. The swarms were vertically distributed, appearing as spiralling columns extending from 1 to 6 m above the ground. Similar swarms were observed by John Wenzel of the University of Kansas, who was working along the crest of a nearby ridge at least 150 m above the Petite Cascade trail. Both of us agreed that the swarms occurred in patches of sunlight within the generally dark forest and were mobile, subsiding when clouds obscured the sun and then reforming in another brightly lit spot when the sun reappeared. This swarming activity was first noticed at approximately 10:00 AM, and had mostly subsided within an hour afterwards. In three full days of work on the mountain this was the only trace we saw of these insects.

The Mt. d'Ambre reserve protects a primary evergreen montane forest, which in the vicinity of the forest station near the Petite Cascade receives a total annual rainfall of 2,600 mm and experiences a mean annual temperature of 17°C (Donque, 1972). The area had received light and intermittent showers the day before the swarming, but according to local foresters there had been little rain during the previous two weeks, although clouds frequently formed over the upper slopes of the mountain due to rising onshore trade winds. The Diego Suarez region of northern Madagascar has a pronounced seven month dry season lasting from May to mid-November, followed by a very rainy period that generally commences in the third week of November at the onset of the northerly monsoon. By mid-November of 1986 the baobabs bordering the bay at Diego Suarez were already beginning to leaf out in anticipation of this change. On Mt. d'Ambre the dry season is moderated by altitude, with rain falling on a more continuous basis throughout the year, but the general annual distribution of precipitation is similar. It thus appears that enicocephalid swarming, and presumably mating, is timed to occur at or immediately prior to the beginning of the heavy rains in this region.—*Dan A. Polhemus, Univ. of Colorado Museum, 3115 S. York St., Englewood, Colorado 80110.*

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